Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services

STATEMENT OF BASIS

Larose Shipyard
Larose, Lafourche Parish, Louisiana
Agency Interest Number: 26155
Activity Number: PER20070001
Proposed Permit Number: 1560-00136-V0

I. APPLICANT

Company:

Larose Shipyard PO Drawer 580 Larose, Louisiana 70373-0580

Facility:

800 Industrial Park Rd Larose, Lafourche Parish, Louisiana Approximate UTM coordinates are 754.35 km East and 3275.53 km North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS

North American Shipbuilding, LLC (NAS) is engaged in building and repairing ships. The current operations include abrasive blasting of metal surfaces, burning and cutting of plate and structural steel, electric arc welding, and surface coating. Steel shot blasting is performed in a controlled (bag filters, 99.5% efficiency) and ventilated enclosure. Sand blasting (No. 3 sand grit) and painting operations are performed outdoors.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on July 9, 2007, requesting a Part 70 operating permit for the Larose Shipyard. Additional information was submitted on June 11, 2008.

Project

With this modification, NAS proposes to:

- Obtain a Part 70 Operating Permit
- Increase the hours of operation of all sources to 8,760 hr/yr
- Increase the blasting media throughput for the Outdoor Blasting source (ARE
 1)
- Increase the throughput for the Burning and Cutting source (ARE 2)
- Increase the maximum allowable aggregate TAP emissions from the Outdoor Painting source (ARE 3) to 79.564 tons per year
- Permit the emission of any TAP from the Outdoor Painting source (ARE 3) at a rate that is equal to its respective Minimum Emission Rate as stated in LAC 33:III.Chapter 51 or the emission rate shown in the "Emissions of TAP/HAP and Other Pollutants" section of this permit, whichever is greater
- Increase the consumption of welding materials used by the Electric Arc Welding source (ARE 4)
- Increase the plate throughput for the Plasma Cutter (EQT 4)
- Increase the board feet throughput for the Carpenter Shop (EQT 5)

Proposed Permit

Permit 1560-00136-V0 will be the initial Part 70 operating permit for the Larose Shipyard.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	18.10	37.82	+ 19.72
SO_2	0.01	0.05	+ 0.04
NO_X	3.35	11.83	+ 8.48
CO	0.73	3.41	+ 2.68
VOC	51.36	113.36	+ 62.00

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note _
ARE 2	Emission Standards for Sulfur Dioxide	DOES NOT APPLY.
	Continuous Emissions Monitoring [LAC	Source emits less than
	33:III.1511.A]	5 tons per year of SO ₂ .
	33.111.1311.71	[LAC 33:III.1502.A.3]

Prevention of Significant Deterioration/Nonattainment Review

Emissions are not increased by significant amounts by this project. Therefore, PSD review is not required.

Streamlined Equipment Leak Monitoring Program

Unit or Plant	Program Being Streamlined	Stream	Overall Most
Site		Applicability	Stringent Program
Larose Shipyard	N/A		

MACT Requirements

Larose Shipyard is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III. Chapter 51. Toluene (Class III) and xylene (Class II) are emitted in amounts that exceed the major source threshold. Copper (and compounds) (Class II), manganese (and compounds) (Class II), toluene (Class III), trichloroethylene (Class II), xylene (Class II) and zinc (and compounds) (Class III) are emitted in amounts that exceed their respective Minimum Emission Rates (MER). The facility must address MACT for emissions of copper (and compounds), manganese (and compounds), trichloroethylene, and xylene.

MACT has been determined to be compliance with 40 CFR 63 Subpart II – National Emissions Standards for Shipbuilding and Ship Repair (Surface Coating).

Air Quality Analysis

(Pinsertialinguality/anallysis and results here, if frequired i)

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

There is no permit shield.

VI. PERIODIC MONITORING

Compliance Assurance Monitoring

Compliance Assurance Monitoring – 40 CFR 64 is not applicable to this facility.

Toxic Air Pollutant Cap Monitoring

Larose Shipyard operates under an emissions cap that applies to all Toxic Air Pollutants (TAP) that are emitted from the Outdoor Painting source (ARE 3). Larose Shipyard must maintain continuous records of TAP emissions from this source by monitoring the TAP content of each type of paint used and calculating the amount of TAP emitted. This calculation will be performed based on the TAP content of each type of paint as well as the quantity of each type of paint used. The facility must keep continuous records of each TAP emitted and must submit a report to LDEQ on an annual basis that details the types and quantities of each TAP emitted.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H_2S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_X) - Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H_2SO_4) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

NAS Larose Yard VOC Emissions Summary 2007 Current Air Permit No. 1560-00136-01

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0.058
. <u>s</u>
Limit
Permit
Copper

Xylenes Permit Limit is 7.930 tpy

N-Butyl Alcohol Permit Limit is 2.990 tpy

Ethylbenzene Permit Limit is 1.990 tpy

Total VOCs Permit Limit is 51.26 tpy

Total TAPs Permit Limit is 23.686 tpy

Started exceeding in January on a 12-Month Rolling Basis (0.088) Started exceeding in May on a Year to Date Basis (0.093)

Started exceeding in April on a 12-Month Rolling Basis (8.3) Started exceeding in June on a Year to Date Basis (8.8)

Started exceeding in June on a 12-Month Rolling Basis (3.0) Started exceeding in September on a Year to Date Basis (3.1)

Started exceeding in June on a 12-Month Rolling Basis (2.2) Started exceeding in July on a Year to Date Basis (2.0)

Started exceeding in August on a 12-Month Rolling Basis (51.7) Started exceeding in October on a Year to Date Basis (57.5)

Started exceeding in June on a 12-Month Rolling Basis (23.9) Started exceeding in September on a Year to Date Basis (27)